

INTERNATIONAL SEARCH REPORT

International application No.
PCT/CA2004/002111

A. CLASSIFICATION OF SUBJECT MATTER
C07C-2/08; C07C-5/02; B01J-21/00; B01J 23/755

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
C07C & B01J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic database(s) consulted during the international search (name of database(s) and, where practicable, search terms used)

Delphion. (Keywords: catalytic distillation, structure or monolith, oligomer* or hydrogenation)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No(s).
X Y	WO 02/092216 (Harkins et al.) Nov. 21, 2002 (pp 8-9, bridging paragraph; p 14, ln 11 - 23; p 16, ln 2 -3; p 17, ln 17 - 34. p 14 refers to <i>Structured Catalysts and Reactors</i> edited by Cybulski & Moulijn)	1 - 5, 7 - 12, 20 - 24 6, 13 - 19, 25 - 55
Y	<i>Structured Catalysts and Reactors</i> (ed: A. Cybulski & J. Moulijn) 1998 Marcel Dekker Inc. (preface, p iv, pp 18, 24 - 25, 29 - 34 (chapter 2))	1 - 55
Y	US 5,235,102 (Palmer et al.) Aug. 10 1993 (col 2, ln 9 - 67; col 3 ln 35 - col 4, ln 15; col 5, ln 2 - 11)	1 - 55
Y	US 5,457,268 (Greene et al.) Oct. 10, 1995 (col 3, line 35 - col 4, line 19)	1 - 55

[X] Further documents are listed in the continuation of Box C.

[X] See patent family annex.

- * Special categories of cited documents :
- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubt on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search 04 February 2005 (04-02-2005)	Date of mailing of the international search report 29 March 2005 (29-03-2005)
--	--

Name and mailing address of the ISA/CA <i>Canadian Intellectual Property Office</i> Place du Portage I, C114 - 1st Floor, Box PCT 50 Victoria Street Gatineau, Quebec K1A 0C9	Authorized officer Christine Bourque (819) 934-3596
---	--

Facsimile No: 001(819)953-2476

INTERNATIONAL SEARCH REPORTInternational application No.
PCT/CA2004/002111**C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No(s).
Y	US 5,003,124 (Smith, Jr. et al.) May 26, 1991 (see entire document)	25 - 37, 44 - 48
Y	US 2001/0006154 (Krug et al.) Jul. 5, 2001 (see entire document)	25 - 37, 44 - 48
A	US 5,057,468 (Adams, J.) Oct. 15, 1991	1 - 55
A	US 5,622,997 (Tennison et al.) Apr. 22, 1997	1 - 55
A	US 6,291,719 (Gao et al.) Sep. 18, 2001	1 - 55

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/CA2004/002111

Patent Document Cited in Search Report	Publication Date	Patent Family Member(s)	Publication Date
WO02092216	21-11-2002	AU1769801 A CA2396581 A1 EP1231991 A2 US6723886 B2 US2003012711 A1 WO0136066 A2 WO02092544 A1	30-05-2001 25-05-2001 21-08-2002 20-04-2004 16-01-2003 25-05-2001 21-11-2002
US5235102	10-08-1993	None	
US5457268	10-10-1995	AT141829T T AU8090594 A AU8096191 A CA2082937 A1 CA2175182 A1 DE69121711D D1 EP0528982 A1 EP0725666 A1 JP9506542T T US5276249 A WO9117828 A1 WO9511726 A1	15-09-1996 22-05-1995 10-12-1991 15-11-1991 04-05-1995 02-10-1996 03-03-1993 14-08-1996 30-06-1997 04-01-1994 28-11-1991 04-05-1995
US5003124	26-03-1991	CA1322766 C US4950803 A US5177289 A US5190730 A	05-10-1993 21-08-1990 05-01-1993 02-03-1993
US20010006154	2001-07-05	AU775121 B2 AU1952501 A CN1425056T T EP1240277 A1 US6398946 B1 US6686511 B2 US6706936 B2 US6841711 B2 WO0146343 A1 ZA200007704 A	15-07-2004 03-07-2001 18-06-2003 18-09-2002 04-06-2002 03-02-2004 16-03-2004 11-01-2005 28-06-2001 13-07-2001

INTERNATIONAL SEARCH REPORT

International application No.
PCT/CA2004/002111

Patent Document Cited in Search Report	Publication Date	Patent Family Member(s)	Publication Date
US5057468	15-10-1991	AR247115 A1 AU644859 B2 AU7427191 A BR9102012 A CA2040585 A1 DE69108098D D1 DE69108098T T2 EP0458472 A1 ES2069206T T3 JP4227801 A KR166976 B1 NZ237850 A	30-11-1994 23-12-1993 21-11-1991 24-12-1991 22-11-1991 20-04-1995 20-07-1995 27-11-1991 01-05-1995 17-08-1992 15-01-1999 28-10-1992
US5622997	22-04-1997	DE19523747 A1 GB2291061 A GB9413408D D0	11-01-1996 17-01-1996 24-08-1994
US6291719	18-09-2001	US6117812 A	12-09-2000